Quien Sabe Point Valley Groundwater Basin

• Groundwater Basin Number: 7-40

• County: Riverside

• Surface Area: 25,300 acres (39.5 square miles)

Basin Boundaries and Hydrology

This basin underlies Parker Valley in eastern Riverside County. The basin is bounded by nonwater-bearing rocks of the Big Maria Mountains on the north, west, and south, and by the Colorado River on the east (Jennings 1967). The valley is drained by Slaughter Tree Wash to the Colorado River. Average annual precipitation ranges up to 6 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater in the basin is found in younger and older alluvium. The older alluvium is of Pleistocene age and consists of fine- to coarse-grained sand interbedded with gravel, silt, and clay.

Restrictive Structures

An unnamed southeast-trending fault traverses the northern portion of the basin; however, it is unknown if it is a barrier to groundwater movement.

Recharge Areas

Likely, recharge of the basin is chiefly from percolation of runoff from surrounding mountains. Additional recharge may come from percolation of precipitation to the valley floor and subsurface inflow.

Groundwater Level Trends

Groundwater movement is east to the Colorado River (DWR 1954).

Groundwater Storage

Groundwater Storage Capacity. The total storage capacity is estimated at 230,000 af (DWR 1975).

Groundwater in Storage. Unknown.

Groundwater Budget (Type C)

Natural recharge in the basin is estimated at about 300 af/yr (DWR 1975).

Groundwater Quality

Characterization. In the southern part of the basin, groundwater is sodium chloride or sodium sulfate in character. Water from one well has a TDS content of 2,854 mg/L.

Impairments. Fluoride, chloride, sulfate, and TDS concentrations are high (DWR 1975).

Well Characteristics

Well yields (gal/min)

Municipal/Irrigation Range: – to 25 Average:
gal/min (DWR 1975)
Total depths (ft)

Domestic Range: Average:

Municipal/Irrigation Range: Average:

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	
Department of Health Services and cooperators	Miscellaneous water quality Title 22 water quality	3

Basin Management

Groundwater management:

Water agencies

Public

Private

References Cited

California Department of Water Resources (DWR). 1954. *Ground Water Occurrence and Quality, Colorado River Basin Region.* Water Quality Investigations Report No. 4.

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Jennings, C. W. 1967. Geologic Map of California, Salton Sea Sheet. Single Map Sheet, Scale 1:250,000.

Additional References

Metzger, D. G. 1965. A Miocene (?) Aquifer in the Parker-Blythe-Cibola Area, Arizona and California. Professional Paper 525-C.

Metzger, D. G., and others. 1973. Geohydrology of the Parker-Blythe-Cibola Area, Arizona and California. Professional Paper 486-G.